Additional file 1.

Key recommendations from five clinical practice guidelines (OARSI, NICE, ACR, EULAR and AAOS)[1-5] and quality indicators for OA care and chronic disease management [6-8].

Optimal care for management of person with knee OA in primary care setting
Diagnosis, assessment and general management
1. Diagnosis is reached clinically without use of imaging or other investigations unless history or physical examination suggest alternative diagnosis
2. Patient receives information and education about the nature of OA, its causes and consequences including pain and prognosis
3. Pain is assessed
4. Function is assessed
5. Body mass index is assessed
6. Fatigue levels, sleep and mood are assessed using reliable self-reported instruments
7. A comprehensive initial biopsychosocial assessment including participation (work/education, leisure, social roles), health education needs, health beliefs and motivation and self-efficacy to self-manage
8. Physical status (eg joint status, mobility, strength, joint alignment, proprioception, posture) is assessed
9. Patient's health education needs, health beliefs, goals, expectations of treatment, treatment preferences and readiness to self-manage are assessed
10. A written personalized management plan including SMART goals and treatment options is formulated with the patient and a copy is provided to the patient
11. The patient has regular review appointments with a health professional scheduled
Non-drug, conservative management
12. Information/advice is provided to the patient about the importance of muscle strengthening exercise and general physical activity
13. A referral to a physiotherapist is provided when physiotherapy is indicated
14. Strategies to assist the patient to adhere to exercise/physical activity behaviours (e.g. health coaching) are employed
15. Information/advice is provided to patients about the importance of maintaining a healthy weight or weight loss if overweight or obese
16. A formal weight loss program or referral to dietician is provided when patient has a body mass index ≥25
17. Strategies to assist the patient to adhere to dietary modifications or weight loss program are employed
18. Advice about activity pacing is provided
19. A patient-centred approach should be adopted and secondary problems including co-morbidities, mood disorders, sleep disturbance, and fatigue, should be managed, consistent with a biopsychosocial approach to managing chronic pain conditions.
20. Mood disorders (depression/anxiety) are assessed using a valid screening tool and, when indicated, management is provided according to recommended practice.

21.	Support and advice is provided to patients to facilitate self-management and on the use of self-treatment strategies such as appropriate footwear, TENS, and thermal agents as appropriate
22.	Walking aids and assistive devices to improve activities of daily living are recommended as indicated
23.	For those at risk of work disability or who want to start/return to work, vocational rehabilitation is provided
24.	Patient is recommended psychological treatments to aid pain management when indicated
Drug recommendations	
25.	When considering drug therapies, patient is screened for potential risk factors for gastrointestinal, cardiovascular, renal and hepatic toxicity
26.	When considering drug therapies, the patient is provided with information about the effects and possible side effects
27.	Topical non-steroidal anti-inflammatory drugs (NSAIDs) are offered when patients have joint symptoms (pain/swelling)
28.	Paracetamol is offered as the first option for oral pain relief
29.	Patients with pain despite more conservative interventions are offered oral NSAIDs, and in patients with gastrointestinal risk factors these are co-prescribed with a PPI or a COX-2 specific inhibitor
30.	A short course opioid prescription is offered only if the patient has moderate-severe pain that does not respond to, or cannot tolerate, other analgesic medications or NSAIDs and joint replacement surgery is contraindicated or delayed
31.	Glucosamine/chondroitin are not recommended
Surgical management	
32.	Intra-articular corticosteroid injections are offered as an adjunct to non-drug conservative management if the patient has moderate-severe pain that does not respond to, or cannot tolerate, other analgesic medications or NSAIDs
33.	Intra-articular hyaluronan injections are not offered
34.	Patients are not referred for arthroscopy of the knee to manage OA pain
35.	Referral to an orthopaedic surgeon for consideration of joint replacement surgery only occurs if the patient: i) has severe pain or substantially impaired function and quality of life despite course of non-surgical treatment, and ii) it is the patient's preference after they have been provided with detailed information about benefits and risks of surgery, the potential consequences of not having or having surgery and expected recovery and rehabilitation after surgery
36.	Referral to an orthopaedic surgeon for consideration of osteotomy only occurs if patient has a mal-aligned knee and uni-compartmental involvement and is too young for a joint replacement

AAOS = American Academy of Orthopaedic Surgeons, ACR = American College of Rheumatology, EULAR = European League against Rheumatism, NICE = National Institute for Health and Care Excellence, OARSI = Osteoarthritis Research Society International.

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